WHAT IS CLAIMED IS:

1. A compound of formula (I):

$$(R^3)_e$$

$$(R^4)_f$$

$$(R^5)_g$$

$$(R^6)_h$$

wherein R¹, R², R³, R⁴, R⁵, and R⁶ are the same or different and selected from the

group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈

substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl,

substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, g, f, and h

are each in the range of 0 to 4, m and n are each in the range of 0 to 5000, and the sum

of m plus n is at least 1.

- 2. The compound of claim 1, wherein R^1 and R^2 are selected from the group consisting of C_1 - C_{30} alkyl groups.
- 3. The compound of claim 2, wherein R^1 is a C_{16} straight chain alkyl group, and R^2 is a 2,2-dimethylpropyl group.
- 5 4. The compound of claim 1, wherein the Weight-Average Molecular Weight of said compound is in the range of about 30,000 to about 110,000.
 - 5. A compound of formula (II):

$$(R^{8})_{j}$$
 $(CH_{2})_{15}CH_{3}$
 $(CH_{2})_{15}CH_{3}$
 $(R^{9})_{k}$
 $(R^{10})_{j}$

wherein R⁷, R⁸, R⁹, and R¹⁰ are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈

substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heterocycloalkyl, cyano, and amino, i, j, k, and l are each in the range of 0 to 4, o and p are each in the range of 0 to 5000, and the sum of o plus p is at least 1.

- 5 6. The compound of claim 5, wherein the Weight-Average Molecular Weight of said compound is in the range of about 30,000 to about 110,000.
 - 7. The product of the reaction between the polymer of formula (III) and a compound selected from the group consisting of compounds of formulae (IV), (V), and combinations thereof:

$$\begin{bmatrix} R^{39} & O & O \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$

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HO
$$(R^{11})_m$$
 $(R^{12})_n$

HO
$$(R^{13})_0$$
 (V)

wherein R^{11} , R^{12} , R^{13} , R^{14} , and R^{39} are the same or different and selected from the group consisting of C_1 - C_{30} alkyl, C_1 - C_{30} substituted alkyl, C_3 - C_8 cycloalkyl, C_3 - C_8 substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, m, n, o, and p are each in the range of 0 to 4, and q is in the range of 2 to 5000.

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- 8. The product of claim 7, wherein, wherein R^{39} is selected from group consisting of C_1 - C_{30} alkyl groups.
- 9. The product of claim 8, wherein, wherein R^{39} is a C_{16} straight chain 10 alkyl group.
 - 10. The product of claim 7, wherein the Weight-Average Molecular Weight of said product is in the range of about 30,000 to about 110,000.
 - 11. A sunscreen composition, comprising a mixture of a photoactive compound, and a compound of formula (I):

$$(R^3)_e$$

$$(R^4)_f$$

$$(R^6)_h$$

$$(R^6)_h$$

wherein R¹, R², R³, R⁴, R⁵, and R⁶ are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, g, f, and h are each in the range of 0 to 4, m and n are each in the range of 0 to 5000, and the sum of m plus n is at least 1.

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12. The composition of claim 11, wherein R^1 and R^2 are selected from the group consisting of C_1 - C_{30} alkyl groups.

- 13. The composition of claim 12, wherein R^1 is a C_{16} straight chain alkyl group, and R^2 is a 2,2-dimethylpropyl group.
- 14. The composition of claim 11, wherein said compound of formula (I) is present said composition in an amount in the range of about 0.01% to about 30% by weight of the total weight of the composition.

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15. The composition of claim 11, further comprising a diester or polyester of naphthalene dicarboxylic acid selected from the group consisting of compounds of formulae (XIII) and (XIV), and combinations thereof:

$$HO = \begin{bmatrix} R^{40} - O_2C & I \\ I & CO_2 \end{bmatrix} R^{41} - OH$$
 (XIII)

$$R^{43}O_2C$$
 $R^{41}-CO_2$ $R^{41}-CO_2$ R^{44} (XIV)

- wherein R^{43} and R^{44} are the same or different and selected from the group consisting of C_1 - C_{22} alkyl groups, diols having the structure HO— R^{41} —OH, and polyglycols having the structure HO— R^{40} —(—O— R^{41} —) $_j$ —OH; wherein each R^{40} and R^{41} is the same or different and selected from the group consisting of C_1 - C_6 straight or branched chain alkyl groups; and wherein h and j are each in a range of 1 to 100 and i is in a range of 0 to 100.
- 16. A method of protecting human skin from ultraviolet radiation comprising topically applying to said skin, in a cosmetically acceptable carrier, the composition of claim 11.

17. A method of protecting human skin from ultraviolet radiation, comprising topically applying to said skin, in a cosmetically acceptable carrier, a compound of formula (I):

$$(R^{3})_{e}$$

$$(R^{4})_{f}$$

$$(R^{5})_{g}$$

$$(R^{6})_{h}$$

wherein R¹, R², R³, R⁴, R⁵, and R⁶ are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, g, f, and h are each in the range of 0 to 4, m and n are each in the range of 0 to 5000, and the sum of m plus n is at least 1.

- 18. The method of claim 17, wherein R^1 and R^2 are selected from the group consisting of C_1 - C_{30} alkyl groups.
- 19. The method of claim 18, wherein R^1 is a C_{16} straight chain alkyl group, and R^2 is a 2,2-dimethylpropyl group.
- 5 20. A method of waterproofing a surface, comprising applying a compound of formula (I) to a selected area of said surface:

$$(R^3)_e$$

$$(R^4)_f$$

$$(R^5)_g$$

$$(R^6)_h$$

wherein R^1 , R^2 , R^3 , R^4 , R^5 , and R^6 are the same or different and selected from the group consisting of C_1 - C_{30} alkyl, C_1 - C_{30} substituted alkyl, C_3 - C_8 cycloalkyl, C_3 - C_8 substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl,

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substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, g, f, and h are each in the range of 0 to 4, m and n are each in the range of 0 to 5000, and the sum of m plus n is at least 1.

- 21. The method of claim 20, wherein R^1 and R^2 are selected from the group consisting of C_1 - C_{30} alkyl groups.
 - 22. The method of claim 21, wherein R^1 is a C_{16} straight chain alkyl group, and R^2 is a 2,2-dimethylpropyl group.
- 23. A method of protecting a selected area of a material from
 photodegradation, comprising applying a compound of formula (I) to said selected
 area of said material:

$$(R^3)_e$$

$$(R^4)_f$$

$$R^2$$

$$R^3$$

$$(R^4)_f$$

$$R^2$$

$$R^3$$

$$R^4$$

$$R^4$$

$$R^5$$

$$R^5$$

$$R^6$$

$$R^6$$

wherein R¹, R², R³, R⁴, R⁵, and R⁶ are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, g, f, and h are each in the range of 0 to 4, m and n are each in the range of 0 to 5000, and the sum of m plus n is at least 1.

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24. The method of claim 23, wherein R^1 and R^2 are selected from the group consisting of C_1 - C_{30} alkyl groups.

- 25. The method of claim 24, wherein R^1 is a C_{16} straight chain alkyl group, and R^2 is a 2,2-dimethylpropyl group.
- 26. A method for forming a film over at least part of a surface, comprising spreading a compound of formula (I) on said part of said surface:

$$(R^3)_e$$

$$(R^4)_f$$

$$(R^5)_g$$

$$(R^6)_h$$

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wherein R^1 , R^2 , R^3 , R^4 , R^5 , and R^6 are the same or different and selected from the group consisting of C_1 - C_{30} alkyl, C_1 - C_{30} substituted alkyl, C_3 - C_8 cycloalkyl, C_3 - C_8 substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, g, f, and h

are each in the range of 0 to 4, m and n are each in the range of 0 to 5000, and the sum of m plus n is at least 1.

- 27. The method of claim 26, wherein R^1 and R^2 are selected from the group consisting of C_1 - C_{30} alkyl groups.
- 5 28. The method of claim 27, wherein R^1 is a C_{16} straight chain alkyl group, and R^2 is a 2,2-dimethylpropyl group.
 - 29. A method of photostabilizing a dibenzoylmethane derivative, said method comprising the step of, adding to said dibenzoylmethane derivative a photostabilizing amount of a compound of formula (I):

$$(R^3)_e$$

$$(R^4)_f$$

$$R^1$$

$$R^2$$

$$R^3$$

$$R^4$$

$$R^5)_g$$

$$R^5)_g$$

wherein R¹, R², R³, R⁴, R⁵, and R⁶ are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, g, f, and h are each in the range of 0 to 4, m and n are each in the range of 0 to 5000, and the sum of m plus n is at least 1.

30. The method of claim 29, wherein R^1 and R^2 are selected from the group consisting of C_1 - C_{30} alkyl groups.

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- The method of claim 30, wherein R^1 is a C_{16} straight chain alkyl group, and R^2 is a 2,2-dimethylpropyl group.
 - 32. The method of claim 29, further comprising the step of, adding to said dibenzoylmethane derivative a diester or polyester of naphthalene dicarboxylic acid selected from the group consisting of compounds of formulae (XIII) and (XIV), and combinations thereof:

$$HO = R^{40} - O_2C = R^{41} - OH$$
 (XIII)

 $R^{43}O_2C$ $R^{41}-CO_2$ $R^{41}-CO_2$ R^{44} (XIV)

wherein R^{43} and R^{44} are the same or different and selected from the group consisting of C_1 - C_{22} alkyl groups, diols having the structure HO— R^{41} —OH, and polyglycols having the structure HO— R^{40} —(—O— R^{41} —) $_j$ —OH; wherein each R^{40} and R^{41} is the same or different and selected from the group consisting of C_1 - C_6 straight or branched

chain alkyl groups; and wherein h and j are each in a range of 1 to 100 and i is in a range of 0 to 100.

33. A compound of formula (VI):

$$(VI)$$

wherein R³, R⁴, R¹⁵, R¹⁶, R¹⁷, and R¹⁸ are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, s, t, u, and v

are each in the range of 0 to 4, q and r are each in the range of 0 to 5000, and the sum of q plus r is at least 1.

- 34. The compound of claim 33, wherein R^3 and R^4 are selected from the group consisting of C_1 - C_{30} alkyl groups.
- 5 35. The compound of claim 34, wherein R^3 is a C_{16} straight chain alkyl group, and R^4 is a 2,2-dimethylpropyl group.
 - 36. The compound of claim 33, wherein the Weight-Average Molecular Weight of said compound is in the range of about 30,000 to about 110,000.
 - 37. A compound of formula (VII):

wherein R^{19} , R^{20} , R^{21} , and R^{22} are the same or different and selected from the group consisting of C_1 - C_{30} alkyl, C_1 - C_{30} substituted alkyl, C_3 - C_8 cycloalkyl, C_3 - C_8 substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, w, x, y, and z are each in the range of 0 to 4, s and t are each in the range of 0 to 5000, and the sum of s plus t is at least 1.

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38. The compound of claim 37, wherein the Weight-Average Molecular Weight of said compound is in the range of about 30,000 to about 110,000.

39. A sunscreen composition, comprising a mixture of a photoactive compound, and a compound of formula (VI):

$$(VI)$$

wherein R³, R⁴, R¹⁵, R¹⁶, R¹⁷, and R¹⁸ are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, s, t, u, and v are each in the range of 0 to 4, q and r are each in the range of 0 to 5000, and the sum of q plus r is at least 1.

- 40. The composition of claim 39, wherein R^3 and R^4 are selected from the group consisting of C_1 - C_{30} alkyl groups.
- 41. The composition of claim 40, wherein R^3 is a C_{16} straight chain alkyl group, and R^4 is a 2,2-dimethylpropyl group.
- The composition of claim 39, wherein said compound of formula (VI) is present said composition in an amount in the range of about 0.01% to about 30% by weight of the total weight of the composition.
 - 43. The composition of claim 39, further comprising a diester or polyester of naphthalene dicarboxylic acid selected from the group consisting of compounds of formulae (XIII) and (XIV), and combinations thereof:

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$$HO = \begin{bmatrix} R^{40} - O_2C & I \end{bmatrix} CO_2 + R^{41} - OH$$
 (XIII)

$$R^{43}O_2C$$
 $R^{41}-CO_2$ $R^{41}-CO_2$ R^{44} (XIV)

wherein R^{43} and R^{44} are the same or different and selected from the group consisting of C_1 - C_{22} alkyl groups, diols having the structure HO— R^{41} —OH, and polyglycols having the structure HO— R^{40} —(—O— R^{41} —) $_j$ —OH; wherein each R^{40} and R^{41} is the same or different and selected from the group consisting of C_1 - C_6 straight or branched chain alkyl groups; and wherein h and j are each in a range of 1 to 100 and i is in a range of 0 to 100.

- 44. A method of protecting human skin from ultraviolet radiation comprising topically applying to said skin, in a cosmetically acceptable carrier, the composition of claim 39.
- 45. A method of protecting human skin from ultraviolet radiation,
 5 comprising topically applying to said skin, in a cosmetically acceptable carrier, a
 compound of formula (VI):

$$(R^{15})_s$$
 $(R^{16})_t$
 $(R^{16})_t$
 $(R^{16})_t$
 $(R^{17})_t$

wherein R^3 , R^4 , R^{15} , R^{16} , R^{17} , and R^{18} are the same or different and selected from the group consisting of C_1 - C_{30} alkyl, C_1 - C_{30} substituted alkyl, C_3 - C_8 cycloalkyl, C_3 - C_8

substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heterocycloalkyl, cyano, and amino, s, t, u, and v are each in the range of 0 to 4, q and r are each in the range of 0 to 5000, and the sum of q plus r is at least 1.

- The method of claim 45, wherein R^3 and R^4 are selected from the group consisting of C_1 - C_{30} alkyl groups.
 - 47. The method of claim 46, wherein R^3 is a C_{16} straight chain alkyl group, and R^4 is a 2,2-dimethylpropyl group.
- 48. A method of waterproofing a surface, comprising applying a compound of formula (VI) to a selected area of said surface:

$$(VI)$$

wherein R^3 , R^4 , R^{15} , R^{16} , R^{17} , and R^{18} are the same or different and selected from the group consisting of C_1 - C_{30} alkyl, C_1 - C_{30} substituted alkyl, C_3 - C_8 cycloalkyl, C_3 - C_8 substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, s, t, u, and v are each in the range of 0 to 4, q and r are each in the range of 0 to 5000, and the sum of q plus r is at least 1.

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49. The method of claim 48, wherein R^3 and R^4 are selected from the group consisting of C_1 - C_{30} alkyl groups.

- 50. The method of claim 49, wherein R^3 is a C_{16} straight chain alkyl group, and R^4 is a 2,2-dimethylpropyl group.
- 51. A method of protecting a selected area of a material from photodegradation, comprising applying a compound of formula (VI) to said selected area of said material:

$$(VI)$$

wherein R^3 , R^4 , R^{15} , R^{16} , R^{17} , and R^{18} are the same or different and selected from the group consisting of C_1 - C_{30} alkyl, C_1 - C_{30} substituted alkyl, C_3 - C_8 cycloalkyl, C_3 - C_8 substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl,

substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, s, t, u, and v are each in the range of 0 to 4, q and r are each in the range of 0 to 5000, and the sum of q plus r is at least 1.

- 52. The method of claim 51, wherein R³ and R⁴ are selected from the
 5 group consisting of C₁-C₃₀ alkyl groups.
 - 53. The method of claim 52, wherein R^3 is a C_{16} straight chain alkyl group, and R^4 is a 2,2-dimethylpropyl group.
 - 54. A method for forming a film over at least part of a surface, comprising spreading a compound of formula (VI) on said part of said surface:

$$(VI)$$

wherein R³, R⁴, R¹⁵, R¹⁶, R¹⁷, and R¹⁸ are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, s, t, u, and v are each in the range of 0 to 4, q and r are each in the range of 0 to 5000, and the sum of q plus r is at least 1.

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55. The method of claim 54, wherein R^3 and R^4 are selected from the group consisting of C_1 - C_{30} alkyl groups.

- 56. The method of claim 55, wherein R^3 is a C_{16} straight chain alkyl group, and R^4 is a 2,2-dimethylpropyl group.
- 57. A method of photostabilizing a dibenzoylmethane derivative, said method comprising the step of, adding to said dibenzoylmethane derivative a photostabilizing amount of a compound of formula (VI):

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$$(R^{15})_s$$

$$(R^{16})_t$$

$$(VI)$$

wherein R^3 , R^4 , R^{15} , R^{16} , R^{17} , and R^{18} are the same or different and selected from the group consisting of C_1 - C_{30} alkyl, C_1 - C_{30} substituted alkyl, C_3 - C_8 cycloalkyl, C_3 - C_8 substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl,

substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, s, t, u, and v are each in the range of 0 to 4, q and r are each in the range of 0 to 5000, and the sum of q plus r is at least 1.

58. The method of claim 57, wherein R^3 and R^4 are selected from the group consisting of C_1 - C_{30} alkyl groups.

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- 59. The method of claim 58, wherein R^3 is a C_{16} straight chain alkyl group, and R^4 is a 2,2-dimethylpropyl group.
- 60. The method of claim 57, further comprising the step of, adding to said dibenzoylmethane derivative a diester or polyester of naphthalene dicarboxylic acid selected from the group consisting of compounds of formulae (XIII) and (XIV), and combinations thereof:

$$R^{43}O_2C$$
 CO_2 R^{41} CO_2 R^{44} (XIV)

wherein R^{43} and R^{44} are the same or different and selected from the group consisting of C_1 - C_{22} alkyl groups, diols having the structure HO— R^{41} —OH, and polyglycols having the structure HO— R^{40} —(—O— R^{41} —) $_j$ —OH; wherein each R^{40} and R^{41} is the same or different and selected from the group consisting of C_1 - C_6 straight or branched chain alkyl groups; and wherein h and j are each in a range of 1 to 100 and i is in a range of 0 to 100.

61. A compound of formula (IX):

wherein R^{23} , R^{24} , R^{25} , R^{26} , R^{27} , R^{28} , R^{29} , R^{30} , R^{31} , R^{32} , R^{33} , R^{34} , R^{35} , R^{36} , R^{37} , and R^{38} are the same or different and selected from the group consisting of C_1 - C_{30} alkyl, C_1 - C_{30} substituted alkyl, C_3 - C_8 cycloalkyl, C_3 - C_8 substituted cycloalkyl, ester, aryl,

- heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, f, h, i, j, k, l, and m are each in the range of 0 to 4, a, b, c, and d are each in the range of 0 to 5000, and the sum of a, b, c, and d is at least 1.
- 62. The compound of claim 61, wherein R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, and $R^{30} \text{ are selected from the group consisting of C}_1\text{-C}_{30} \text{ alkyl groups.}$
 - 63. The compound of claim 62, wherein R^{23} , R^{24} , R^{25} , R^{26} are C_{16} straight chain alkyl groups, and R^{27} , R^{28} , R^{29} , and R^{30} are 2,2-dimethylpropyl groups.

- 64. The compound of claim 61, wherein the Weight-Average Molecular Weight of said compound is in the range of about 30,000 to about 110,000.
 - 65. A compound of formula (X):

$$(R^{40})_s$$

$$(R^{40})_s$$

$$(R^{42})_u$$

$$(CH_2)_{15}CH_3$$

$$HO$$

$$(R^{43})_v$$

$$(R^{45})_x$$

$$(R^{45})_x$$

$$(R^{46})_v$$

- wherein R³⁹, R⁴⁰, R⁴¹, R⁴², R⁴³, R⁴⁴, R⁴⁵, and R⁴⁶ are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, r, s, t, u, v, w, x, and y are each in the range of 0 to 4, n, o, p, and q are each in the range of 0 to 5000, and the sum of n, o, p, and q is at least 1.
 - 66. The compound of claim 65, wherein the Weight-Average Molecular Weight of said compound is in the range of about 30,000 to about 110,000.

67. A sunscreen composition, comprising a mixture of a photoactive compound, and a compound of formula (IX):

wherein R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴, R³⁵, R³⁶, R³⁷, and R³⁸

5 are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, f, h, i, j, k, l, and m are each in the range of 0 to 4, a, b, c, and d are each in the range of 0 to 5000, and the sum of a, b, c, and d is at least 1.

68. The composition of claim 67, wherein R^{23} , R^{24} , R^{25} , R^{26} , R^{27} , R^{28} , R^{29} , and R^{30} are selected from the group consisting of C_1 - C_{30} alkyl groups.

- 69. The composition of claim 68, wherein R^{23} , R^{24} , R^{25} , R^{26} are C_{16} straight chain alkyl groups, and R^{27} , R^{28} , R^{29} , and R^{30} are 2,2-dimethylpropyl groups.
- 70. The composition of claim 67, wherein said compound of formula (IX) is present said composition in an amount in the range of about 0.01% to about 30% by weight of the total weight of the composition.

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71. The composition of claim 67, further comprising a diester or polyester of naphthalene dicarboxylic acid selected from the group consisting of compounds of formulae (XIII) and (XIV), and combinations thereof:

$$HO = \begin{bmatrix} R^{40} - O_2C & II \\ II & CO_2 \end{bmatrix} R^{41} - OH$$
 (XIII)

$$R^{43}O_2C$$
 R^{41} CO_2 R^{41} CO_2 R^{44} CO_2

- wherein R^{43} and R^{44} are the same or different and selected from the group consisting of C_1 - C_{22} alkyl groups, diols having the structure HO— R^{41} —OH, and polyglycols having the structure HO— R^{40} —(—O— R^{41} —) $_j$ —OH; wherein each R^{40} and R^{41} is the same or different and selected from the group consisting of C_1 - C_6 straight or branched chain alkyl groups; and wherein h and j are each in a range of 1 to 100 and i is in a range of 0 to 100.
- 72. A method of protecting human skin from ultraviolet radiation comprising topically applying to said skin, in a cosmetically acceptable carrier, the composition of claim 67.

73. A method of protecting human skin from ultraviolet radiation, comprising topically applying to said skin, in a cosmetically acceptable carrier, a compound of formula (IX):

- wherein R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴, R³⁵, R³⁶, R³⁷, and R³⁸ are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, f, h, i, j, k, l, and m are each in the range of 0 to 4, a, b, c, and d are each in the range of 0 to 5000, and the sum of a, b, c, and d is at least 1.
 - 74. The method of claim 73, wherein R^{23} , R^{24} , R^{25} , R^{26} , R^{27} , R^{28} , R^{29} , and R^{30} are selected from the group consisting of C_1 - C_{30} alkyl groups.

- 75. The method of claim 74, wherein R^{23} , R^{24} , R^{25} , R^{26} are C_{16} straight chain alkyl groups, and R^{27} , R^{28} , R^{29} , and R^{30} are 2,2-dimethylpropyl groups.
- 76. A method of waterproofing a surface, comprising applying a compound of formula (IX) to a selected area of said surface:

wherein R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴, R³⁵, R³⁶, R³⁷, and R³⁸ are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, f, h, i, j, k, l, and m are each in the range of 0 to 4, a, b, c, and d are each in the range of 0 to 5000, and the sum of a, b, c, and d is at least 1.

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- 77. The method of claim 76, wherein R^{23} , R^{24} , R^{25} , R^{26} , R^{27} , R^{28} , R^{29} , and R^{30} are selected from the group consisting of C_1 - C_{30} alkyl groups.
- 78. The method of claim 77, wherein R^{23} , R^{24} , R^{25} , R^{26} are C_{16} straight chain alkyl groups, and R^{27} , R^{28} , R^{29} , and R^{30} are 2,2-dimethylpropyl groups.
- 5 79. A method of protecting a selected area of a material from photodegradation, comprising applying a compound of formula (IX) to said selected area of said material:

wherein R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴, R³⁵, R³⁶, R³⁷, and R³⁸

10 are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, f, h, i, j, k, l, and m are each in the range of 0

to 4, a, b, c, and d are each in the range of 0 to 5000, and the sum of a, b, c, and d is at least 1.

- 80. The method of claim 77, wherein R^{23} , R^{24} , R^{25} , R^{26} , R^{27} , R^{28} , R^{29} , and R^{30} are selected from the group consisting of C_1 - C_{30} alkyl groups.
- 5 81. The method of claim 80, wherein R²³, R²⁴, R²⁵, R²⁶ are C₁₆ straight chain alkyl groups, and R²⁷, R²⁸, R²⁹, and R³⁰ are 2,2-dimethylpropyl groups.
 - 82. A method for forming a film over at least part of a surface, comprising spreading a compound of formula (IX) on said part of said surface:

$$(R^{31})_e$$
 $(R^{31})_e$
 $(R^{32})_f$
 $(R^{32})_f$
 $(R^{34})_f$
 $(R^{34})_f$
 $(R^{34})_f$
 $(R^{35})_f$
 $(R^{35})_f$
 $(R^{35})_f$
 $(R^{35})_f$
 $(R^{35})_f$
 $(R^{35})_f$
 $(R^{35})_f$

wherein R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴, R³⁵, R³⁶, R³⁷, and R³⁸ are the same or different and selected from the group consisting of C₁-C₃₀ alkyl, C₁-C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted

heterocycloalkyl, cyano, and amino, e, f, h, i, j, k, l, and m are each in the range of 0 to 4, a, b, c, and d are each in the range of 0 to 5000, and the sum of a, b, c, and d is at least 1.

- 83. The method of claim 82, wherein R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, and 5 R³⁰ are selected from the group consisting of C₁-C₃₀ alkyl groups.
 - 84. The method of claim 83, wherein R^{23} , R^{24} , R^{25} , R^{26} are C_{16} straight chain alkyl groups, and R^{27} , R^{28} , R^{29} , and R^{30} are 2,2-dimethylpropyl groups.
- 85. A method of photostabilizing a dibenzoylmethane derivative, said method comprising the step of, adding to said dibenzoylmethane derivative a photostabilizing amount of a compound of formula (IX):

wherein R^{23} , R^{24} , R^{25} , R^{26} , R^{27} , R^{28} , R^{29} , R^{30} , R^{31} , R^{32} , R^{33} , R^{34} , R^{35} , R^{36} , R^{37} , and R^{38} are the same or different and selected from the group consisting of C_1 - C_{30} alkyl, C_1 -

C₃₀ substituted alkyl, C₃-C₈ cycloalkyl, C₃-C₈ substituted cycloalkyl, ester, aryl, heteroaryl, heterocycloalkyl, substituted aryl, substituted heteroaryl, substituted heterocycloalkyl, cyano, and amino, e, f, h, i, j, k, l, and m are each in the range of 0 to 4, a, b, c, and d are each in the range of 0 to 5000, and the sum of a, b, c, and d is at least 1.

- 86. The method of claim 85, wherein R^{23} , R^{24} , R^{25} , R^{26} , R^{27} , R^{28} , R^{29} , and R^{30} are selected from the group consisting of C_1 - C_{30} alkyl groups.
- 87. The method of claim 86, wherein R^{23} , R^{24} , R^{25} , R^{26} are C_{16} straight chain alkyl groups, and R^{27} , R^{28} , R^{29} , and R^{30} are 2,2-dimethylpropyl groups.
- 88. The method of claim 85, further comprising the step of, adding to said dibenzoylmethane derivative a diester or polyester of naphthalene dicarboxylic acid selected from the group consisting of compounds of formulae (XIII) and (XIV), and combinations thereof:

$$HO = \begin{bmatrix} R^{40} - O_2C & II \\ II & CO_2 \end{bmatrix} R^{41} - OH$$
 (XIII)

$$R^{43}O_2C$$
 CO_2 R^{41} CO_2 R^{44} (XIV)

wherein R^{43} and R^{44} are the same or different and selected from the group consisting of C_1 - C_{22} alkyl groups, diols having the structure HO— R^{41} —OH, and polyglycols having the structure HO— R^{40} —(—O— R^{41} —)_j—OH; wherein each R^{40} and R^{41} is the same or different and selected from the group consisting of C_1 - C_6 straight or branched

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chain alkyl groups; and wherein h and j are each in a range of 1 to 100 and i is in a range of 0 to 100.